

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* VINCENT P. VACCARELLI and BARBARA VON BERGMAN

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Appeal 2008-0093  
Application 10/083,263  
Technology Center 3600

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Decided: April 29, 2008

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Before TERRY J. OWENS, JENNIFER D. BAHR, and  
JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellants appeal from a rejection of claims 1-9 and 19-21.  
Claims 10-18 have been canceled.

THE INVENTION

The Appellants claim a customer satisfaction system. Claim 1 is  
illustrative:

1. A customer satisfaction system, comprising:  
a query module for automatically sending a query to a customer as to whether the customer has any problems with goods or services provided by a provider that have not been resolved to the customer's satisfaction, according to a predetermined schedule, and for receiving responses from customers to the queries, wherein a query includes a user interface for receiving responses input from a customer;

an analysis module for analyzing responses from customers to identify a customer problem, for sending the identified customer problem to a problem solver module for resolution by a problem solver, and for tracking status of the identified customer problem; and

at least one problem solver module for receiving an identified customer problem from the analysis module, for transmitting the identified customer problem to a problem solver, for receiving a solution to the identified customer problem from the problem solver, and for transmitting the solution to the customer;

wherein, upon transmission of the solution to the identified customer problem to the customer, the problem solver module notifies the analysis module of the solution and the analysis module causes the query module to send a query to the customer requesting verification that the problem has been solved.

#### THE REFERENCES

Goldband	US 6,434,532 B2	Aug. 13, 2002 (filed Mar. 12, 1998)
Sakakibara	US 6,564,227 B2	May 13, 2003 (filed Dec. 27, 2000)

### THE REJECTION

Claims 1-9 and 19-21 stand rejected under 35 U.S.C. § 103 over Sakakibara in view of Goldband.<sup>1</sup>

### OPINION

We reverse the Examiner's rejection. We need to address only claim 1, the sole independent claim. That claim requires "a query module for automatically sending a query to a customer as to whether the customer has any problems with goods or services provided by a provider that have not been resolved to the customer's satisfaction".

For that claim requirement the Examiner relies upon Sakakibara at column 1, lines 42-48, column 3, lines 21-24 and column 4, lines 61-65 (Ans. 3).<sup>2</sup>

Those portions of Sakakibara are as follows:

The present invention has been devised in consideration of the above mentioned problems [not being able to sufficiently support customers merely by obtaining information regarding the status or usage of a device (col. 1, ll. 25-27)]. An object of the present

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<sup>1</sup> Regarding claim 20 the Examiner also relies upon US 2002/0087882 A1 to Schneier et al. (Ans. 10). Because that reference is not included in the statement of the rejection it is not properly before us and, therefore, has not been considered in reaching our decision. *See In re Hoch*, 428 F.2d 1341, 1342 n.3 (CCPA 1970).

<sup>2</sup> The Examiner relies upon Goldband's column 8, lines 20-25 for a disclosure of an interactive user interface (Ans. 6). That disclosure is: "Present a survey to all users after a specified time has passed or a specified level of usage has been achieved (FIG. 7)." In figure 7, online banking customers are asked whether they are very satisfied, somewhat satisfied, neutral, somewhat dissatisfied or very dissatisfied with Quicken<sup>®</sup>. The users are not asked whether there are any unresolved problems.

invention is to obtain a wide range of information of a device located at a customer, and to use the usage information and the quality information of the device to give various facilities to the customer and to positively support the customer [col. 1, ll. 43-48].

\* \* \*

The customer support center may comprise an information acquisition setting part for specifying the target device or a time, and obtaining information regarding the use of the target device [col. 3, ll. 21-24].

\* \* \*

The exemplary method may comprise the steps of:

- a) the customer support center collecting and distributing usage information and quality information of the device;
- b) the customer support center storing part or all of the usage information and quality information; and
- c) the customer information system using the usage information and quality information for supporting the customer [col. 4, l. 61 – col. 5, l. 3].

Those portions of Sakakibara disclose obtaining information from a device, not from querying a customer as to whether the customer has any unresolved problems with the device. Other portions of Sakakibara have disclosures similar to those relied upon by the Examiner. For example (col. 2, ll. 12-20):

Thereby, the customer support center collects the usage information indicating an amount to which the device has been used and the quality information indicating the quality of the device from the at least one device located at the customer, and distributes the same information. The at least one customer information system uses the same information for supporting the customer. Thereby, various conveniences/advantages can be provided to the customer, and positive supporting of the customer can be achieved.

The Examiner argues that “an information acquisition setting part represents sending queries to the user” and that “[q]uality data represents whether the customer has problems” (Ans. 3).

Those arguments are not well taken because Sakakibara’s information is obtained from the device, not by querying the customer as to whether the customer has any unresolved problems with the device.

The Examiner argues (Ans. 7):

Based on the broadest reasonable interpretation of this limitation [“a query module for automatically sending a query to a customer as to whether the customer has any problems with goods or services provided by a provider that have not been resolved to the customer’s satisfaction”], any query about “quality” of the good or service (i.e. whether the customer has problems that are unresolved) would meet this limitation. Since the system of Sakakibara queries a good for quality information, Examiner asserts that Sakakibara at the very least suggests the broadest reasonable interpretation of this limitation.

Contrary to the Examiner’s argument, Sakakibara does not query whether the customer has problems that are unresolved. As pointed out above, Sakakibara’s quality information is obtained from the device.

The Examiner argues (Ans. 8):

Assuming that this interpretation is wrong, Examiner still believes Sakakibara at the very least suggests user interaction/querying. In particular, even if the primary intent of Sakakibara is to automatically communicate solely with a device (as argued by Appellant) Sakakibara also teaches communication with a user (see for example column 15, lines 9-12 and column 19, lines 32-42).

Those portions of Sakakibara are as follows:

For example, not only a typical case where the device does not operate, the device has bad condition or deficiencies for operation or the like, but also a case where a user presses an alarm button when problems occur in output images, abnormal sounds occur, or the like is also determined as a case to generate fault information [col. 15, ll. 8-13].

\* \* \*

Furthermore, from a manner in which a customer actually used the device, is proposed to add optional facilities, or a device having a suitable copy volume (durability) is proposed.

When such information concerning the device is provided to a customer, conditions of the customer and reasons thereof are indicated thereto simultaneously.

Such operation may be performed at a house of the customer using a mobile terminal through communication with the customer information system via a communication line [col. 19, ll. 32-42].

Those portions of Sakakibara disclose receiving fault information from the device when an alarm button is pressed by the customer, and proposing to the customer optional facilities or another device based upon the customer's usage of the current device. The Examiner has not established that the disclosure of such communication would have led one of ordinary skill in the art to query the customer as to whether there are any unresolved problems.

For the above reasons we conclude that the Examiner has not established a prima facie case of obviousness of the Appellants' claimed invention.

The dissent argues that Sakakibara discloses all of the hardware devices necessary to effect and be capable of follow-up mail notification of unresolved problems monitored by the system.

Sakakibara does not disclose that the system is either hardwired or programmed to send a query to a customer as to whether the customer has any problems with goods or services provided by a provider that have not been resolved to the customer's satisfaction as required by the Appellants' claims. Even if Sakakibara's system is capable of being programmed to send such a query, that capability, without the programming, does not provide the query module required by the Appellants' claims. As stated by the Court of Custom and Patent Appeals in *In re Prater*, 415 F.2d 1393, 1403 n.29 (CCPA 1969):

In one sense, a general-purpose digital computer may be regarded as but a storeroom of parts and/or electrical components. But once a program has been introduced, the general-purpose digital computer becomes a special-purpose digital computer (i.e., a specific electrical circuit with or without electro-mechanical components) which, along with the process by which it operates, may be patented subject, of course, to the requirements of novelty, utility, and non-obviousness.

The dissent argues that the Examiner's argument that it would have been obvious to one of ordinary skill in the art to use Sakakibara's system to send an open-ended query periodically to provide increased technical support properly combines Sakakibara and Goldband.

The Examiner does not point out, and it is not apparent, where Goldband discloses an open-ended query. Goldband discloses presenting "a survey to all users after a specified time has passed or a specified level of usage has been achieved (Fig. 7)" (col. 8, ll. 21-23). The query in figure 7 referred to in that portion of Goldband asks users whether they are very satisfied, somewhat satisfied, neutral, somewhat dissatisfied or very

dissatisfied with banking online with Quicken<sup>®</sup>. That is not an open-ended query, let alone a query as to whether the customer has any problems with goods or services provided by a provider that have not been resolved to the customer's satisfaction.

The dissent points out that the Examiner takes official notice that "it is old and well known in the art to send 'follow-up' queries to customers in order to verify that the work performed was done to the customer's satisfaction" (Ans. 7). The dissent argues that the Examiner's conclusion that "[i]t would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of '227 [Sakakibara] to schedule an additional query right after a fault has been handled in order to verify that the problem has been resolved to the customer's satisfaction", *see id.*, is based upon an underlying technical line of reasoning that is clear and unmistakable.

Sakakibara's fault information is obtained by the device's self diagnosis, and repairs are performed in response to the fault information (col. 14, l. 60 – col. 15, l. 7). The Examiner has not established that one of ordinary skill in the art would have been led to query the customer as to whether a problem that was not reported by the customer but, rather, was determined by the device, has been resolved to the customer's satisfaction. Sakakibara also discloses (col. 15, ll. 8-18):

not only a typical case where the device does not operate, the device has bad condition or deficiencies for operation or the like, but also a case where a user presses an alarm button when problems occur in output images, abnormal sounds occur, or the like is also determined as a case to generate fault information.

The alarm information indicates a condition of not a fault but needing maintenance, and does not indicate urgency in comparison to fault information. By reporting such a condition to the customer support center before fault occurs, the customer support center can perform maintenance works schematically.

Even if one of ordinary skill in the art would have been led to query the customer as to whether the condition that caused Sakakibara's customer to press the alarm button has been resolved to the customer's satisfaction, the Examiner has not established that one of ordinary skill in the art would have been led to query the customer as to whether the customer has any problems with goods or services that have not been resolved to the customer's satisfaction.

For the above reasons we are not persuaded by the dissent of error in our decision.

#### DECISION

The rejection of claims 1-9 and 19-21 under 35 U.S.C. § 103 over Sakakibara in view of Goldband is reversed.

REVERSED

FISCETTI, *Administrative Patent Judge*, dissenting in result.

I. It is first important to note that Appellants' use of the term "module" leaves open to interpretation whether "module" is a device or a software component. *See In re Comiskey*, 499 F.3d 1365, at 1379 (Fed. Cir. 2007) *citing* Alan Freedman, *The Computer Glossary* 268 (8th ed. 1998) (defining module as "[a] self-contained hardware or software component that interacts with a larger system). Thus, under the broadest reasonable interpretation, Appellants' claims require the use of a computer as part of the customer satisfaction system. *See id.*

However, Appellants' claim 1 only describes each of the different modules using functional language, i.e., a query module for..., an analysis module for..., and at least one problem solver module for... without tying such descriptions to positive claim language, such as produced when one uses the term "configured" or, even more positively, 35 U.S.C. 112, sixth paragraph language. Unlike the machine claim in *Prater* which used means plus function language to describe its device, *see Prater* at 1397-1398, Appellants' claim 1 does not use such language, and thus should not be given the same interpretation of the machine claim in *Prater*. To do so would be to dilute the provisions of the statute. However, although Appellants' language is functional, we are nevertheless required to give the language weight to the extent that the prior art is or is not capable of meeting the functional limitation. *See In re Schreiber*, 128 F.3d 1473 (Fed. Cir. 1997).

With this understanding, I find that Sakakibara discloses a communication server 21 analogous to Appellants' query module which is capable of functioning to automatically send a query to a customer as to whether the customer has any problems with goods or services provided by a provider that have not been resolved to the customer's satisfaction as required by claim 1. This is because the communication server 21 is disclosed in Sakakibara as being part of a customer support center 11 which collects usage information indicating the amount to which each device 1<sub>1</sub> through 1<sub>N</sub> located at the customer has been used and quality information indicating the qualities of these devices. (Sakakibara, col.8, ll. 39-43)

The Specification describes that the "[q]uery module 10 automatically sends out queries in the form of an email to customers according to a predetermined schedule." (Specification 4:12-13) Sakakibara describe its system as one complete with all the devices necessary to effect and be capable of follow-up mail notification of unresolved problems monitored by the system, by using namely:

a communication server 21, a system management server 22, a database server 23, a router 25, a fault reporting server 26, a remote information collecting and setting server 27, a supply reporting server 28, an alarm management server 29, a counter obtaining server 30, a communication-device fault dealing-with server 31, an installation work server 32, an information modification and distribution server 33, a LAN (Local Area Network) 36 and the networks 10 and 13.

(Sakakibara, col.8, ll. 58-67)

Thus, Sakakibara would be capable of functioning as claimed.

Because this rationale is substantially different from that used by the Examiner, it would be denominated as new grounds of rejection under 37 C.F.R. § 41.50(b) if adopted by the majority.

II. However, even if one were to interpret the functional language associated with the description of the query module as a positive limitation, the rejection under review is nevertheless based on obviousness under 35 U.S.C. § 103(a) and the function of the query module should be addressed in light of the combination of Sakakibara and Goldband.

The Examiner has provided a teaching in Goldband of “the presentation of a survey to a customer after a specified time period within an interactive user interface (see column 8, lines 20-25 and Figure 7).” (Final 3) Such a survey, while not specifically asking about unresolved problems, is nevertheless a query sent to a customer. Further, the Examiner properly combines these references by establishing “...that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of '227 to include a open-ended survey (query) sent on a periodic basis (i.e. once a month or once a week) as taught by '532. One of ordinary skill in the art would have been motivated to combine the references in order to provide increase technical support.” *Id.*

Although the Examiner characterizes the query as open-ended in his 35 U.S.C. § 103(a) analysis, claim 1 does not require this distinction. Even still, what the query says other than causing a response to effect solution- which occurs in Goldband when the vendor reads the response and acts given that Goldband is directed to customer support services (Goldband, col.

1, 11-13; col.8, ll.36-38), goes to the content or the expression of the query which should not be a patentable distinction.

Examiner addresses the missing feature of a query which asks if there are unresolved problems to a customer by taking

...Official Notice in the Office Action mailed 12/23/03 that it is old and well known in the art to send "follow-up" queries to customers in order to verify that the work performed was done to the customer's satisfaction. This old and well-know Official Notice statement is being treated as admitted prior art as it was not traversed by Appellant. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of '227 to schedule an additional query right after a fault has been handled in order to verify that the problem has been resolved to the customer's satisfaction.

(Final 4)

The Examiner's point here is well taken in that such a follow-up question in a customer service setting is not just obvious, but it is expected. In my view, the Examiner judicially applied assertions that certain facts are well known or common knowledge in the art by providing a technical line of reasoning underlying the determination of obviousness that is clear and unmistakable. MPEP § 2144.03(B) and (E). I therefore credit the Official Notice of the Examiner with respect to the issue of a follow-up email seeking any unresolved problems from a customer. Appellants have not provided any evidence to rebut these findings by the Examiner. Hence, I find no error in the Examiner's use of Official Notice.

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From the findings set forth above (II), it is my opinion that a prima facie case of obviousness was established by the Examiner for the subject matter of claim 1.

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